

**Amendments to the Claims:**

1. (Currently Amended) A chip for a chip-containing portable article, ~~the chip~~ comprising:
  - a silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and
  - an additional layer of silicon that:
    - is sealed to the active face of the silicon substrate layer by a sealing layer;
    - ~~the additional layer of silicon covering~~ covers at least part of said active face; and
    - ~~the additional layer of silicon comprising~~ comprises physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$ .
2. (Withdrawn)
3. (Withdrawn)
4. (Cancelled)
5. (Previously Presented) A chip according to Claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are silicon dopants.
6. (Previously Presented) A chip according to Claim 5, wherein the concentration of silicon dopants lies in the range  $10^{17}$  to  $10^{20}$  atoms per  $\text{cm}^3$ .
7. (Previously Presented) A chip according to Claim 5, wherein the silicon dopants are phosphorus or boron.
8. (Cancelled)

9. (Cancelled)
10. (Previously Presented) A chip according to Claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are formed by surface irregularities.
11. (Cancelled)
12. (Previously Presented) A chip according to claim 10, wherein the surfaces irregularities are provided in the face of the additional layer of silicon that is in contact with the sealing layer.
13. (Previously Presented) A chip according to Claim 10, wherein the surface irregularities are provided in the face of the additional layer of silicon that is opposite to the face that is in contact with the sealing layer.
14. (Previously Presented) A chip according to Claim 1, wherein the physical means for providing physical protection against the action of electromagnetic radiation are formed by at least one deposition of metal on the additional layer of silicon.
15. (Previously Presented) A chip according to Claim 14, wherein the metal deposition has a thickness greater than 50 Å.
16. (Previously Presented) A chip according to Claim 14, wherein the metal deposition is on the face of the additional of silicon that is in contact with the sealing layer.
17. (Previously Presented) A chip according to Claim 14, wherein the metal deposition is on the face of the additional layer of silicon that is opposite to the face that is in contact with the sealing layer.
18. (Cancelled)
19. (Previously Presented) A chip according to claim 16, wherein the metal deposition has a thickness of about 100 Å.

20. (Currently Amended) A portable article provided with a chip ~~comprising: that~~  
~~comprises~~

a silicon substrate layer having an active face with circuits integrated  
therein defining a central processor unit and memories; and

~~, the chip further comprising~~ an additional layer of silicon that;

is sealed to the active face of the silicon substrate layer by a  
sealing layer;

~~, the additional layer of silicon covering~~ covers at least part of said  
active face; and

~~, the additional layer of silicon comprising~~ comprises physical  
means for providing physical protection against the action  
of electromagnetic radiation in the infrared range at a  
wavelength longer than 1  $\mu\text{m}$ .

21. (New) The chip according to Claim 5 wherein the silicon substrate layer  
comprises:

physical means for providing physical protection against the action of  
electromagnetic radiation in the infrared range at a wavelength  
longer than 1  $\mu\text{m}$ ; and

wherein said physical means comprises silicon dopants in the face of the  
silicon substrate layer that is opposite to the active face.

22. (New) The chip according to Claim 21, wherein the concentration of silicon  
dopants in the silicon substrate layer lies in the range  $10^{17}$  to  $10^{20}$  atoms per  $\text{cm}^3$ .

23. (New) The chip according to Claim 22, wherein the silicon dopants in the silicon  
substrate layer are phosphorus or boron.

24. (New) A chip according to Claim 10 wherein the silicon substrate layer comprises:
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$ ; and
  - wherein said physical means comprises surface irregularities in the face of the silicon substrate layer that is opposite to the active face.
25. (New) A chip according to Claim 14 wherein the silicon substrate layer comprises:
- physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$ ; and
  - wherein said physical means comprising deposition of metal on the face of the silicon substrate layer that is opposite to the active face.
26. (New) A chip for a chip-containing portable article comprising:
- a silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and
  - physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$  comprising silicon dopants in the face of the silicon substrate layer that is opposite to the active face.
27. (New) A chip according to Claim 26, wherein the concentration of silicon dopants lies in the range  $10^{17}$  to  $10^{20}$  atoms per  $\text{cm}^3$ .
28. (New) A chip according to Claim 27, wherein the silicon dopants are phosphorus or boron.
29. (New) A chip for a chip-containing portable article comprising:

a silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and  
physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$  comprising surface irregularities in the face of the silicon substrate layer that is opposite to the active face.

30. (New) A chip for a chip-containing portable article comprising:

a silicon substrate layer having an active face with circuits integrated therein defining a central processor unit and memories; and  
physical means for providing physical protection against the action of electromagnetic radiation in the infrared range at a wavelength longer than 1  $\mu\text{m}$  comprising deposition of metal on the face of the silicon substrate layer that is opposite to the active face.

31. (New) A chip according to Claim 30, wherein the metal deposition has a thickness greater than 50 Å.

32. (New) A chip according to claim 30, wherein the metal deposition has a thickness of about 100 Å.